LArIAT Online/DAQ Plans

During the Summer 2015 shutdown, online computing:

- Patch kernels, system, libraries, security to latest SLF6

- Update CAEN drivers and libraries, if needed

- Add one (or two) dedicated DQM servers

- Note that lariat-daq01 again intended as DAQ hot spare,

- Move DQM processes to new machines lariat-daq03

- Please send me suggestions for online computing improvements

- Improve DAQ error presentation to shifter

- Clean up ArtDaq issues (sticky ports, core dumps)

LArIAT DAQ Issues in Run 1

- CAEN Digitizers hiccup regularly, both types, event mismatch and communications errors (CAEN informed) – bursty and rate, difficult to debug

- Wire Chamber TDCs and Controller configuration and alignment issues – need expert consultation

- WUT data have not been validated by us

- LArASIC sporadic configuration corruption and noise appearance

Can try to address during shutdown, except last item

Important LArIAT DAQ Issues

- Almost complete lack of spares of all DAQ boards
  - No V1740s, V1751s, [WUT], V1495, V2718 spares
  - Have one A3818 (CAEN PCI bridge) spare
  - For V1495, could beg A/D, SeaQuest, DS-50 in a pinch
  - Collaborations needs to be aware we're teetering on this edge – this is my due-diligence declaration

- We have 32 spare channels on V1740 number 7
  - Would have to purchase LEMO adapter ~ $1K
  - Need to make compelling case for purchase
  - Should be done now, due to long lead time